

Remarks

Claims 1-14 were pending.

Claims 1, 3 and 6-8 are cancelled.

Claims 2, 4-5 and 9-14 are now pending.

Claims 2, 4, 9 and 12 are amended.

Amended Claims

Claim 2 is amended to change dependency of claim 4.

Claim 4 is amended to incorporate the limitations of claim 1.

Claims 9 and 12 are amended to correct a spelling error.

No new matter is added.

Information Disclosure Statement

Applicants attach a copy of the journal article cited in the IDS mailed on April 5, 2005. The EP0003002 has several US equivalents. They are US 4321118, US 4315807, US 4308400 and US 4318791.

35 USC 112, second paragraph

Claim 4 as explained above incorporates the limitations of claim 1. However, the limitations of claim 1 is revised to make clear what is meant by R may in addition be hydrogen when A is simultaneously the group $-C(CH_3)_2-$. The phrase "in addition" has been deleted. The intent of the original wording to make clear that this hydrogen is in addition to the methyl or trimethylsilyl. By removing the wording altogether the intent becomes clearly.

Applicants believe this corrects the 112 rejection.

35 USC 102(b)

Claims 1-3 and 6-8 are rejected under 35 USC 102(b) as being anticipated by Felder et al, US 4,308,400.

Claims 1-3 and 6-8 are cancelled. All other claims ultimately depend from claim 4 or 5. Claim 4 or Claim 5 require at least one aminoacrylate.

There is no mention or suggestion of incorporation of an aminoacrylate in US'400, thus all the remaining claims are novel in light of US'400.

35 USC 103(a)

Claims 4, 5 and 9-14 are rejected under 35 USC 1039a) as being unpatentable over Felder, US 4,308,400 as applied to claim 1 above, and in view of Gaske, US 3,844,916.

Examiner explains that Gaske discloses a radiation curable coating composition containing photoinitiator and an ethylenically unsaturated compound being an aminoacrylate in order to cure rapidly with minimum ultraviolet light.

Thus according to the examiner, it would be obvious to one of ordinary skill in the art at the time of the invention to use an aminoacrylate as the ethylenically unsaturated compound of the composition of Felder to increase the extent and speed of UV polymerization.

As examiner is aware, unobvious results rebut an obviousness rejection.

Applicants point to tables 1 (p. 39) and 2 (p. 40) in the present specification.

Table 1 shows the curing rate of overprint coating formulation including an aminoacrylate with the photoinitiators of claimed formulae (I), (II) and (III) (examples 1-5).

The same formulations including aminoacrylate are also cured using standard photoinitiators.

There is a clear improvement in cure rate shown in Table 1 for those formulations cured with photoinitiators according to formula (I), (II) or (III) when compared to typical photoinitiators (DAROCURE 1173 and IRGACURE 184).

Table 1 shows that the cure speed improvement comes from not just the addition of an aminoacrylate but when the aminoacrylate is combined with photoinitiators of formula (I), (II) or (III) a doubling of the cure rate results.

Table 2 shows the same overprint coating formulation without aminoacrylate using the photoinitiators of formula (I), (II) and (III) verses typical photoinitiators (DAROCURE 1173 and IRGACURE 184). The photoinitiators of formula (I), (II) and (III) show much improved curing rate over DAROCURE 1173 and IRGACURE 184.

The results are unobvious in light of the cited prior art. US'400 makes no mention of aminoacrylates. Gaske makes no mention of the particular photoinitiators of formula (I), (II) or (III). Neither provide any direction for selecting the particular photoinitiators with aminoacrylates and certainly neither reference understood the advantages in cure rate for combining the two elements (particular photoinitiators with aminoacrylates).

Furthermore, the showing is commensurate in scope with the definitions of formula (I), (II) and (III).

Formula (II) is example 1 in tables 1 and 2.

Formula (III) is example 2 in tables 1 and 2.

Formula (I) includes examples 3, 4 and 5 in tables 1 and 2.

Thus the applicants believe the above rejection is overcome.

Reconsideration and withdrawal of the rejection of claims 2, 4-5, and 9-14 is respectfully solicited in light of the remarks and amendments *supra*.

Since there are no other grounds of objection or rejection, passage of this application to issue with claims 2, 4-5 and 9-14 is earnestly solicited.

Applicants submit that the present application is in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



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Enclosure: Supplemental IDS, required fee and Article by C. Groenenboom et al., J. of Photochemistry and Photobiology A: chemistry, Vol. 107, (1997), pp 261-269..